

356

Work Order ID 108199

108199

Page 1

October-08-13 11:09:37 AM

Item ID: 646.3301

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Upper Cutter Assy

Start Date: 10/08/13 Start Qty: 5.00

5

Cust Item ID:

Required Date: 10/08/13 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 13-10-10 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

646.3300

N/C

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

5



14-01-22

120

0.00

120

Small Fab

Memo

0.00

Small Fab

Two fastener must be install finger-tight (see note 9)

5



14-01-22

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598: 125306
exp. date: 14/04/16

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 108199

108199

Page 2

October-08-13 11:09:37 AM

Item ID: 646.3301

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Cutter Assy

Start Date: 10/08/13 Start Qty: 5.00

5

Cust Item ID:

Required Date: 10/08/13 Req'd Qty: 5.00

5

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: Date: Tooling: Date:

Stop *NR2*

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

14/1/31

140

140

Packaging

Packaging

Identify as per dwg & Stock Location: 8428 0.00

Memo

0.00

IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV

5x 14-1-31

DAS
26
9-89

150

150

QC

Quality Control

QC21- Final Inspection - Work Order Release 0.00

Memo

0.00

MLJ 14-02-03

14-01-31

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

Picklist Print

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Page 1

Work Order ID: 108199

Parent Item: 646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 10/08/13

Required Date: 10/08/13

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310 LH Half		Manufactured	No			110	Each	19.0000	1	5	mlw	14.01.21	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MF		19		101038					
				101038		15							
				103644		4							
646.3311 RH Half		Manufactured	No			110	Each	10.0000	1	5	mlw	14.01.21	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST520		10		108423					
				102840		10							
646.3312 Center Plate		Manufactured	No			110	Each	22.0000	1	5	mlw	14.01.21	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST428A		6		108526					
				103686		6							
				ST437		16							
				103083		16							
646.3313 Upper Guide		Manufactured	No			110	Each	16.0000	1	5	mlw	14.01.21	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST428A		6		107622					
				106094 X2		6							
				ST437		10							
				102884 X2		10							
646.3314 Blade		Manufactured	No			110	Each	10.0000	1	5	mlw	14.01.21	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MF		10		108506X4					
				103043		10		107683X1					

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

Picklist Print

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Page 2

Work Order ID: 108199
Parent Item: 646.3301
Parent Item Name: Upper Cutter Assy

Start Date: 10/08/13

Required Date: 10/08/13

Start Qty: 5.00

Required Qty: 5.00

646.3315 Manufactured No 110 Each 10.0000 1 5 W/W 14.01.21

Location	Loc Qty	Loc Code
MF	10	
103034	10	

108498

646.3316 Manufactured No 110 Each 16.0000 1 5 W/W 14.01.21

Location	Loc Qty	Loc Code
MF	16	
102893	6	
103515	10	

108431 x1

NAS1149FN832P Purchased No 110 Each 14,858.000 36 180 W/W 14.01.21

Location	Loc Qty	Loc Code
ST294	4882	
123522	398	
123900	4484	
ST510a	9976	
125268	9976	

123900

MS21042L08 Purchased No 110 Each 2,661.0000 18 90 W/W 14.01.21

Location	Loc Qty	Loc Code
ST315	661	
122141	3	
122452	9	
122814	500	
123900	149	
ST505	2000	
125445	2000	

127304

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Shop Packet Print

Page 2

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
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<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
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Page 3

Work Order ID: 108199

Parent Item: 646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 10/08/13

Required Date: 10/08/13

Start Qty: 5.00

Required Qty: 5.00

NAS1149F0332P

Purchased

No

110

Each

8,154.0000

6

30

Washer

m/m 14.01.21

Location

Loc Qty

Loc Code

GA

182

125646

122063

182

ST294

158

122063

158

ST295

3

123352

3

st510

2811

123900

2811

ST510a

5000

125646

5000

AN3-12A

Purchased

No

110

Each

175.0000

2

10

Bolt

m/m 14.01.21

Location

Loc Qty

Loc Code

GA

6

125709

122407

6

ST351

169

114536

1

123352

2

m125709

100

m125752

2

m126192

64

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Shop Packet Print

Page 3

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Skid-tube <input type="checkbox"/></td> <td style="width:25%;">Crosstube <input type="checkbox"/></td> <td style="width:25%;">Water Jet <input type="checkbox"/></td> <td style="width:25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Picklist Print

October-08-13 11:09:37 AM

Page 4

Work Order ID: 108199
 Parent Item: 646.3301
 Parent Item Name: Upper Cutter Assy

Start Date: 10/08/13

Required Date: 10/08/13

Start Qty: 5.00

Required Qty: 5.00

MS21042L3 Purchased No 110 Each 5,426.0000 3 15 *m/w 14.01.21*
 Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	3	127831
122141	3	
GA	18	
122452	18	
ST314	304	
111668	1	
117885	32	
119017	55	
119075	138	
123265	43	
M126036	35	
ST506	1153	
123900	849	
124291	304	
ST510a	3948	
M126275	21	
M126333	3927	

MS27039-08-19 Purchased No 110 Each 2,162.0000 18 90 *m/w 14.01.21*
 Screw

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST307	89	127831x61
123525	89	
ST308	40	
m126474	40	
ST309	833	
125654	833	
st510	1200	
124309 x29	1200	

October-08-13 11:09:37 AM

Shop Packet Print

Page 4

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 33%;"> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </td> <td style="width: 33%;"> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </td> <td style="width: 33%;"> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </td> <td style="width: 33%;"> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </td> </tr> </table>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
---	---	---	--	---

Picklist Print

October-08-13 11:09:37 AM

Page 5

Work Order ID: 108199
 Parent Item: 646.3301
 Parent Item Name: Upper Cutter Assy

Start Date: 10/08/13 Required Date: 10/08/13
 Start Qty: 5.00 Required Qty: 5.00

AN3-14A Purchased No 110 Each 191.0000 1 5 m/w 14.01.21
 Bolt

Location	Loc Qty	Loc Code
ST351	101	126192
m125709	1	
m127044	100	
ST511	89	
m126192	89	
ST512	1	
123759	1	

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03724

SHEET 1 OF 1

DWG NO. 646.3300

REV: N/C

PREPARED
BY B. PETERS

DATE: 12/05/12

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY:

ENGR

MFG

QC

EFF:

NEXT ORDER

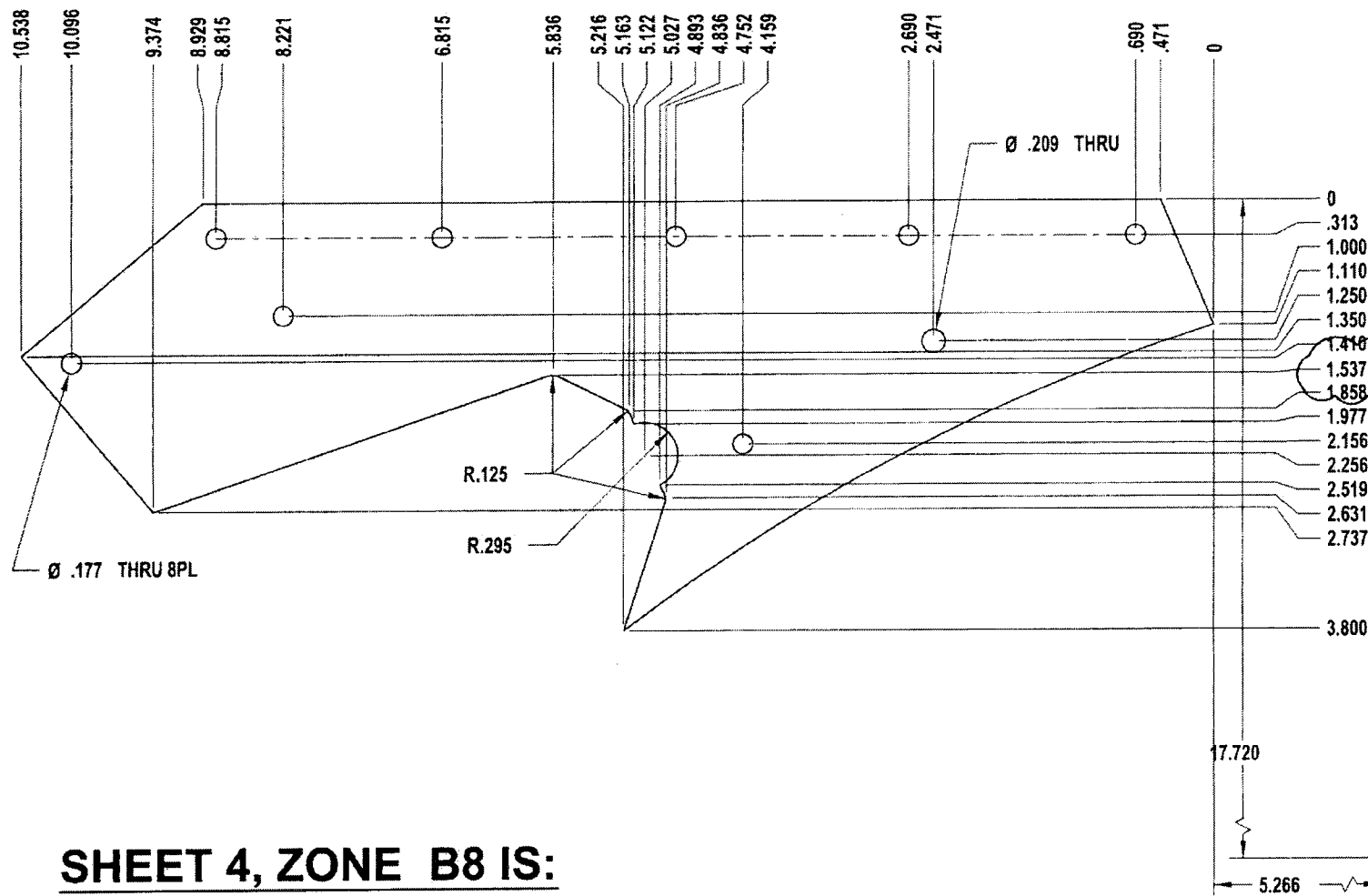
TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON:

REVISED ORDINATE DIMENSION.

ECR:

D-12-025



108199 MJS
13-10-10

SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:

☐ RFMS ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM

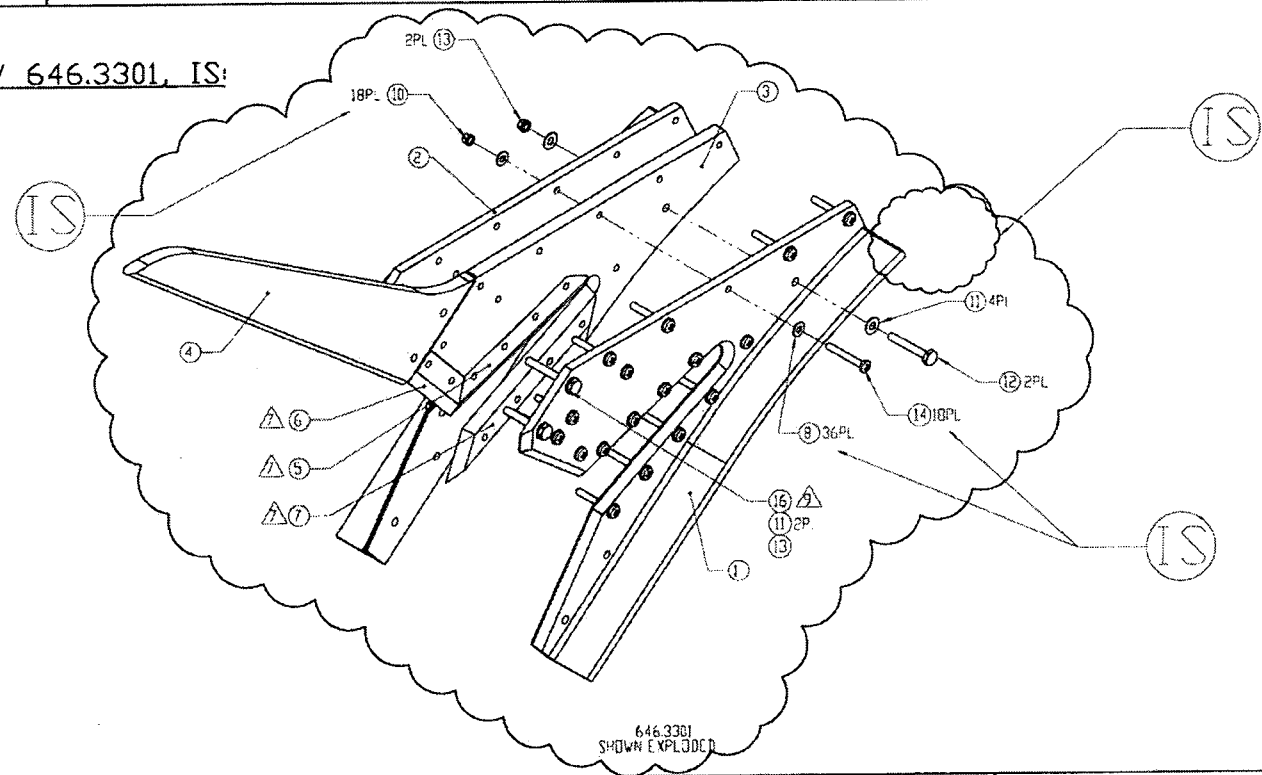
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

108199

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICL NO.		02196		SHEET 1 - OF 2	
	DWG NO.	646.3300	REV: N/C	PREPARED BY	S. HUFF	DATE: 01/05/09
	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.					
	DWG TITLE: UPPER CUTTER ASSY					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>		QC <i>[Signature]</i>	EFF: NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS				

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765	18	SCREW	MS27039-0819
10	R	601.1541	18	LOCKNUT	MS21042L08
9	D	601.2766	3	RIVET	MS20470AD5-18
8	R	601.2764	36	WASHER	NAS1149FN832P
			.3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED: <input type="checkbox"/> MDL <input checked="" type="checkbox"/> INSTALL INSTRUC <input checked="" type="checkbox"/> ICA <input type="checkbox"/> FMS <input checked="" type="checkbox"/> BOM					CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR
					DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

108199

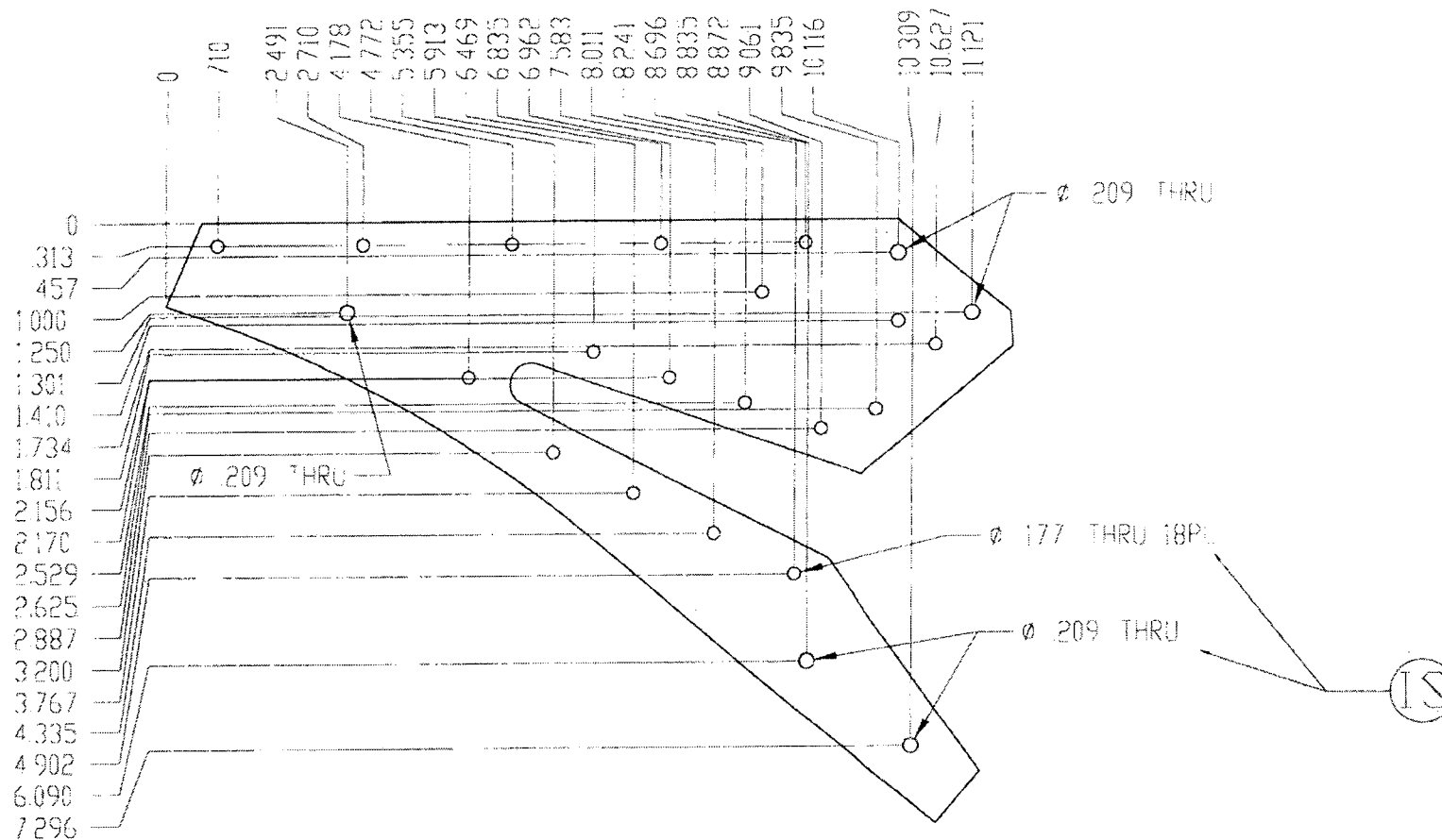
APICAL INDUSTRIES, INC.

ENGINEERING CHANL_ ORDER NO.

02196

SHEET 2 OF 2

SHEET 3, SECTION VIEW A-A, IS:



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



02196, 0372

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

2 FINISH; HARD ANODIZE 1AW MIL-A-8625 TYPE III,
CLASS 2, COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME 1AW MIL-P-23377J TYPE I CLASS N

3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS

4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N

5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED

6. IDENTIFY IAW MPP-120

7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY

8 CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE

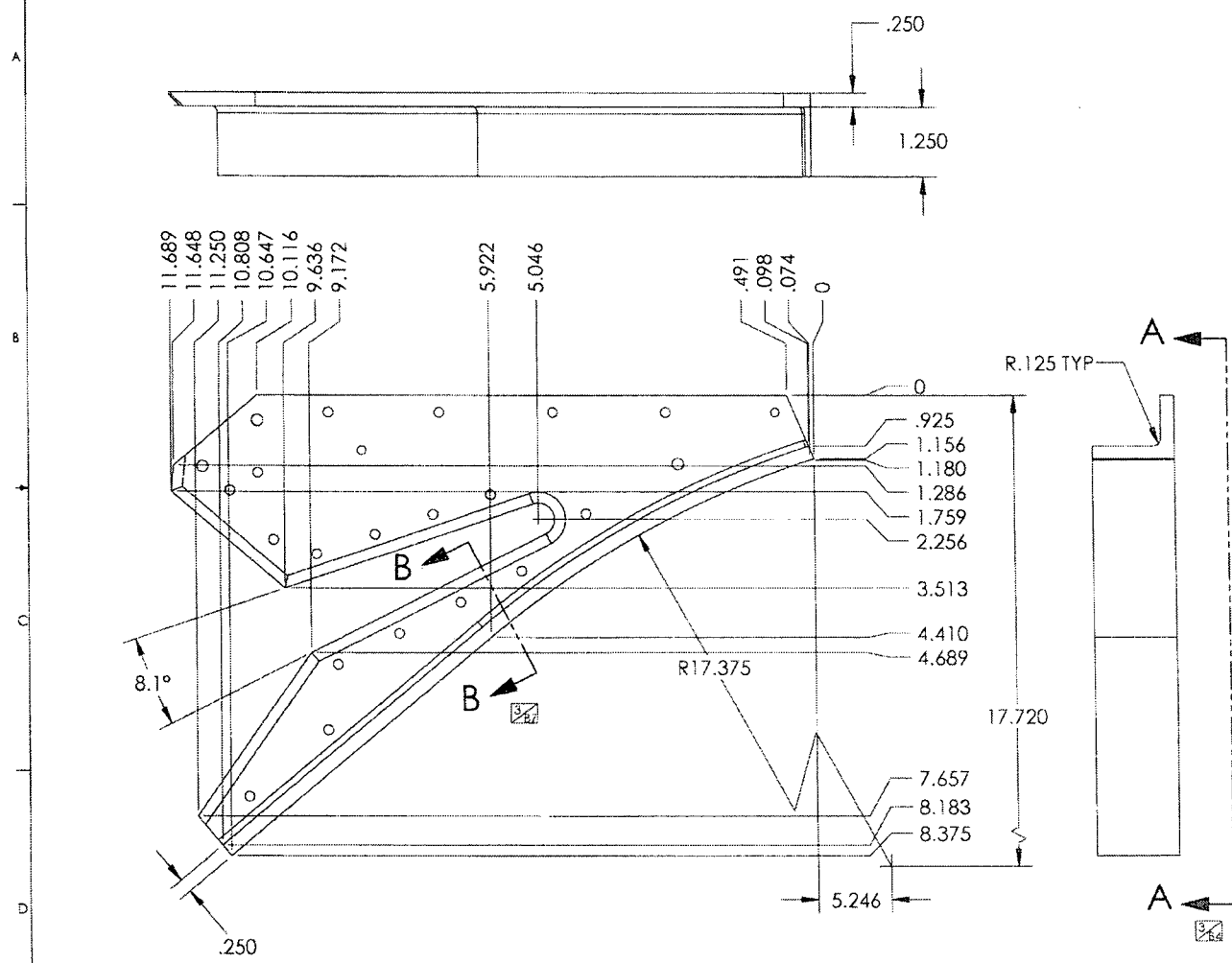
9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

[illegible]

108199

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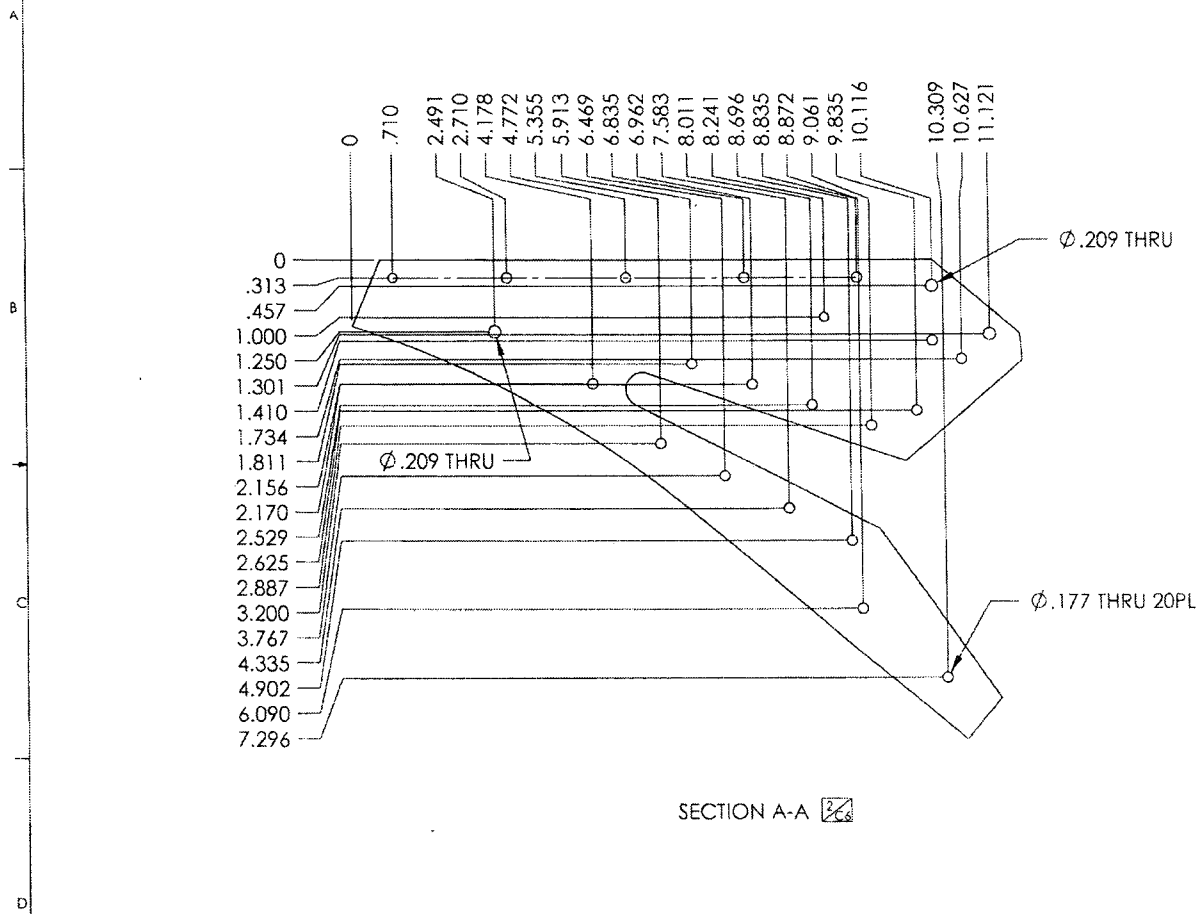


646.3310 SHOWN
646.3311 OPPOSITE

ORIGINAL DATE: 08-24-08 DRAWN BY: J. HUNT CHECKED BY: P. BEAUCHAMPEL P. BEAUCHAMPEL CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: SURFACE DECIMALS: .01 HOLE DECIMALS: .005 ANGLES: .5°		UPPER CUTTER ASSY	
REV	CHANGE CODE	DATE	BY
1	B	07/24/08	N/C
SCALE: NONE		SHEET 2 OF 8	

108199

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ORIGINAL DATE: 08-28-08 DRAWN BY: J. B. B. B. CHECKED BY: J. B. B. B. APPROVED BY: J. B. B. B.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
UPPER CUTTER ASSY		646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE .01 FRACTIONS ARE 1/16 ANGLES ± .5°	SIZE: 07M26	ENG. NO: 646.3300	REV: N/C
SCALE: NONE		SHEET: 3 OF 6	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
AFICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF AFICAL INDUSTRIES IS PROHIBITED.

646.3312
HOLE DIMENSIONS AND LOCATIONS
+/- .002

Side View Dimensions:
Width: .375

Top View Dimensions and Hole Locations (inches):
 - Hole 1: 10.538, 10.096
 - Hole 2: 9.374, 8.929, 8.815
 - Hole 3: 8.221
 - Hole 4: 6.815
 - Hole 5: 5.836
 - Hole 6: 5.216, 5.163, 5.122, 5.027, 4.893, 4.836, 4.752, 4.159
 - Hole 7: 2.690, 2.471
 - Hole 8: .690, .471
 - Hole 9: 0
 - Hole 10: .313, 1.000, 1.110, 1.250, 1.350, 1.410, 1.527, 1.858, 1.977, 2.156, 2.256, 2.519, 2.631, 2.737
 - Hole 11: 0
 - Hole 12: 3.800
 - Hole 13: 7.720
 - Hole 14: 5.266

Other Dimensions:
 - R.125
 - R.295
 - R17.425
 - Ø.177 THRU 8PL
 - Ø.209 THRU

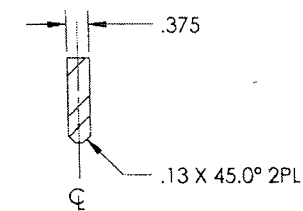
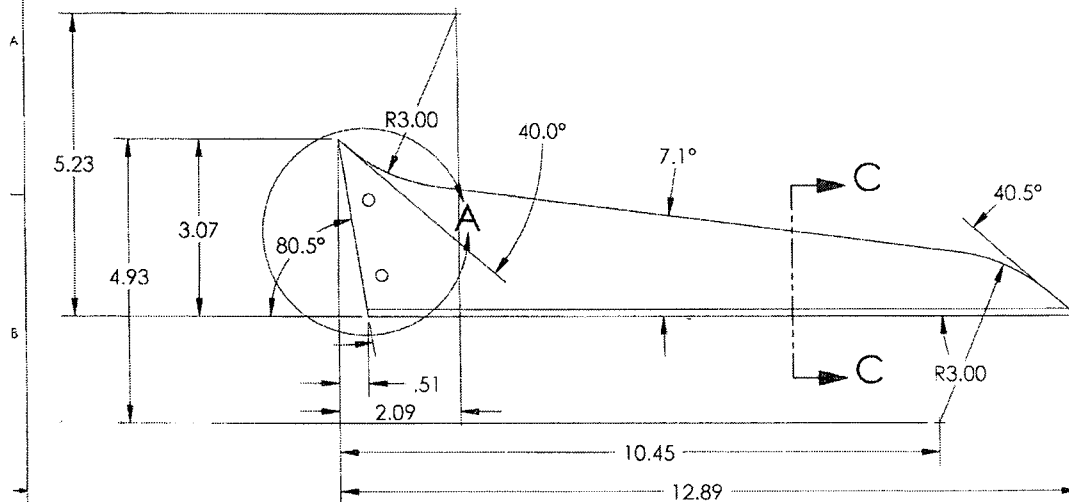
646.3312
HOLE DIMENSIONS AND LOCATIONS
+/- .002

APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	UPPER CUTTER ASSY	
UNITED STATES SPECIFIED CONSTRUCTION AND CONSTRUCTION 1. 1/2" X 1/2" X 1/2" X 1/2" 2. 1/2" X 1/2" X 1/2" X 1/2" 3. 1/2" X 1/2" X 1/2" X 1/2" 4. 1/2" X 1/2" X 1/2" X 1/2" 5. 1/2" X 1/2" X 1/2" X 1/2" 6. 1/2" X 1/2" X 1/2" X 1/2" 7. 1/2" X 1/2" X 1/2" X 1/2" 8. 1/2" X 1/2" X 1/2" X 1/2" 9. 1/2" X 1/2" X 1/2" X 1/2" 10. 1/2" X 1/2" X 1/2" X 1/2" 11. 1/2" X 1/2" X 1/2" X 1/2" 12. 1/2" X 1/2" X 1/2" X 1/2" 13. 1/2" X 1/2" X 1/2" X 1/2" 14. 1/2" X 1/2" X 1/2" X 1/2" 15. 1/2" X 1/2" X 1/2" X 1/2" 16. 1/2" X 1/2" X 1/2" X 1/2" 17. 1/2" X 1/2" X 1/2" X 1/2" 18. 1/2" X 1/2" X 1/2" X 1/2" 19. 1/2" X 1/2" X 1/2" X 1/2" 20. 1/2" X 1/2" X 1/2" X 1/2" 21. 1/2" X 1/2" X 1/2" X 1/2" 22. 1/2" X 1/2" X 1/2" X 1/2" 23. 1/2" X 1/2" X 1/2" X 1/2" 24. 1/2" X 1/2" X 1/2" X 1/2" 25. 1/2" X 1/2" X 1/2" X 1/2" 26. 1/2" X 1/2" X 1/2" X 1/2" 27. 1/2" X 1/2" X 1/2" X 1/2" 28. 1/2" X 1/2" X 1/2" X 1/2" 29. 1/2" X 1/2" X 1/2" X 1/2" 30. 1/2" X 1/2" X 1/2" X 1/2" 31. 1/2" X 1/2" X 1/2" X 1/2" 32. 1/2" X 1/2" X 1/2" X 1/2" 33. 1/2" X 1/2" X 1/2" X 1/2" 34. 1/2" X 1/2" X 1/2" X 1/2" 35. 1/2" X 1/2" X 1/2" X 1/2" 36. 1/2" X 1/2" X 1/2" X 1/2" 37. 1/2" X 1/2" X 1/2" X 1/2" 38. 1/2" X 1/2" X 1/2" X 1/2" 39. 1/2" X 1/2" X 1/2" X 1/2" 40. 1/2" X 1/2" X 1/2" X 1/2" 41. 1/2" X 1/2" X 1/2" X 1/2" 42. 1/2" X 1/2" X 1/2" X 1/2" 43. 1/2" X 1/2" X 1/2" X 1/2" 44. 1/2" X 1/2" X 1/2" X 1/2" 45. 1/2" X 1/2" X 1/2" X 1/2" 46. 1/2" X 1/2" X 1/2" X 1/2" 47. 1/2" X 1/2" X 1/2" X 1/2" 48. 1/2" X 1/2" X 1/2" X 1/2" 49. 1/2" X 1/2" X 1/2" X 1/2" 50. 1/2" X 1/2" X 1/2" X 1/2" 51. 1/2" X 1/2" X 1/2" X 1/2" 52. 1/2" X 1/2" X 1/2" X 1/2" 53. 1/2" X 1/2" X 1/2" X 1/2" 54. 1/2" X 1/2" X 1/2" X 1/2" 55. 1/2" X 1/2" X 1/2" X 1/2" 56. 1/2" X 1/2" X 1/2" X 1/2" 57. 1/2" X 1/2" X 1/2" X 1/2" 58. 1/2" X 1/2" X 1/2" X 1/2" 59. 1/2" X 1/2" X 1/2" X 1/2" 60. 1/2" X 1/2" X 1/2" X 1/2" 61. 1/2" X 1/2" X 1/2" X 1/2" 62. 1/2" X 1/2" X 1/2" X 1/2" 63. 1/2" X 1/2" X 1/2" X 1/2" 64. 1/2" X 1/2" X 1/2" X 1/2" 65. 1/2" X 1/2" X 1/2" X 1/2" 66. 1/2" X 1/2" X 1/2" X 1/2" 67. 1/2" X 1/2" X 1/2" X 1/2" 68. 1/2" X 1/2" X 1/2" X 1/2" 69. 1/2" X 1/2" X 1/2" X 1/2" 70. 1/2" X 1/2" X 1/2" X 1/2" 71. 1/2" X 1/2" X 1/2" X 1/2" 72. 1/2" X 1/2" X 1/2" X 1/2" 73. 1/2" X 1/2" X 1/2" X 1/2" 74. 1/2" X 1/2" X 1/2" X 1/2" 75. 1/2" X 1/2" X 1/2" X 1/2" 76. 1/2" X 1/2" X 1/2" X 1/2" 77. 1/2" X 1/2" X 1/2" X 1/2" 78. 1/2" X 1/2" X 1/2" X 1/2" 79. 1/2" X 1/2" X 1/2" X 1/2" 80. 1/2" X 1/2" X 1/2" X 1/2" 81. 1/2" X 1/2" X 1/2" X 1/2" 82. 1/2" X 1/2" X 1/2" X 1/2" 83. 1/2" X 1/2" X 1/2" X 1/2" 84. 1/2" X 1/2" X 1/2" X 1/2" 85. 1/2" X 1/2" X 1/2" X 1/2" 86. 1/2" X 1/2" X 1/2" X 1/2" 87. 1/2" X 1/2" X 1/2" X 1/2" 88. 1/2" X 1/2" X 1/2" X 1/2" 89. 1/2" X 1/2" X 1/2" X 1/2" 90. 1/2" X 1/2" X 1/2" X 1/2" 91. 1/2" X 1/2" X 1/2" X 1/2" 92. 1/2" X 1/2" X 1/2" X 1/2" 93. 1/2" X 1/2" X 1/2" X 1/2" 94. 1/2" X 1/2" X 1/2" X 1/2" 95. 1/2" X 1/2" X 1/2" X 1/2" 96. 1/2" X 1/2" X 1/2" X 1/2" 97. 1/2" X 1/2" X 1/2" X 1/2" 98. 1/2" X 1/2" X 1/2" X 1/2" 99. 1/2" X 1/2" X 1/2" X 1/2" 100. 1/2" X 1/2" X 1/2" X 1/2" 101. 1/2" X 1/2" X 1/2" X 1/2" 102. 1/2" X 1/2" X 1/2" X 1/2" 103. 1/2" X 1/2" X 1/2" X 1/2" 104. 1/2" X 1/2" X 1/2" X 1/2" 105. 1/2" X 1/2" X 1/2" X 1/2" 106. 1/2" X 1/2" X 1/2" X 1/2" 107. 1/2" X 1/2" X 1/2" X 1/2" 108. 1/2" X 1/2" X 1/2" X 1/2" 109. 1/2" X 1/2" X 1/2" X 1/2" 110. 1/2" X 1/2" X 1/2" X 1/2" 111. 1/2" X 1/2" X 1/2" X 1/2" 112. 1/2" X 1/2" X 1/2" X 1/2" 113. 1/2" X 1/2" X 1/2" X 1/2" 114. 1/2" X 1/2" X 1/2" X 1/2" 115. 1/2" X 1/2" X 1/2" X 1/2" 116. 1/2" X 1/2" X 1/2" X 1/2" 117. 1/2" X 1/2" X 1/2" X 1/2" 118. 1/2" X 1/2" X 1/2" X 1/2" 119. 1/2" X 1/2" X 1/2" X 1/2" 120. 1/2" X 1/2" X 1/2" X 1/2" 121. 1/2" X 1/2" X 1/2" X 1/2" 122. 1/2" X 1/2" X 1/2" X 1/2" 123. 1/2" X 1/2" X 1/2" X 1/2" 124. 1/2" X 1/2" X 1/2" X 1/2" 125. 1/2" X 1/2" X 1/2" X 1/2"		

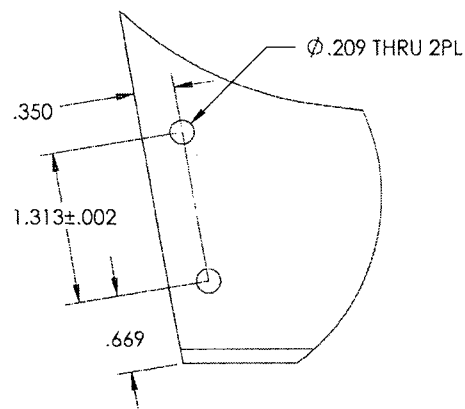
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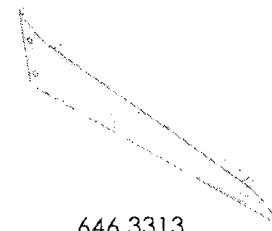
REV	DESCRIPTION	DATE	APPROVED



SECTION C-C



DETAIL A



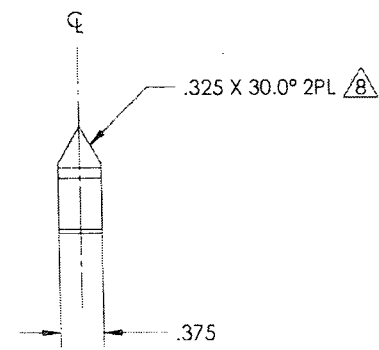
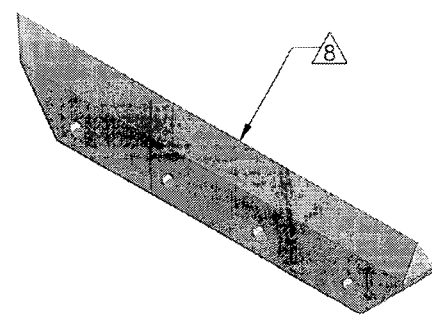
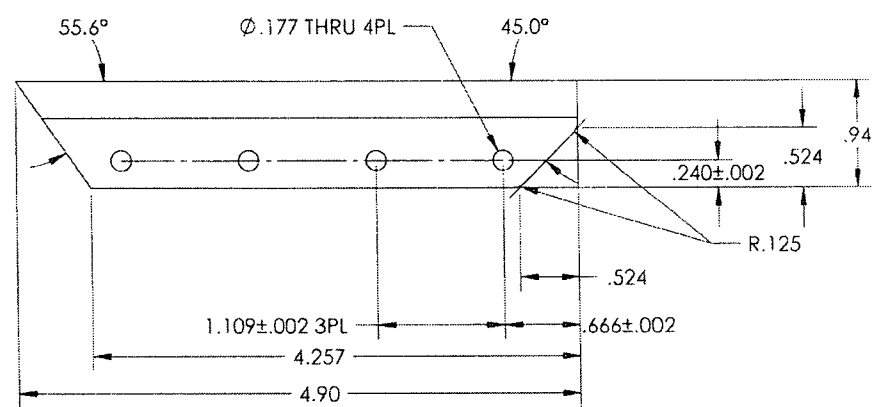
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ORIGINAL DATE: 08/20/08 DRAWN BY: J. HOFF DRAWING APPROVAL: P. HANCOCK RELEASED: 08/20/08 CONTRACT: 118		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300	
UNITS: DIMENSIONS SPACED DIMENSIONS ARE IN INCHES DECIMALS ARE 3 PLACES DECIMALS 1.01 3 PLACES DECIMALS 1.01 ANGLE: 1.5°		SHEET CODE: B DWG NO: 646.3300 SCALE: NONE	REV: 14/C SHEET: 5 OF 6
UPPER CUTTER ASSY		646.3313	

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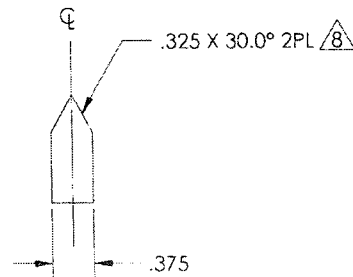
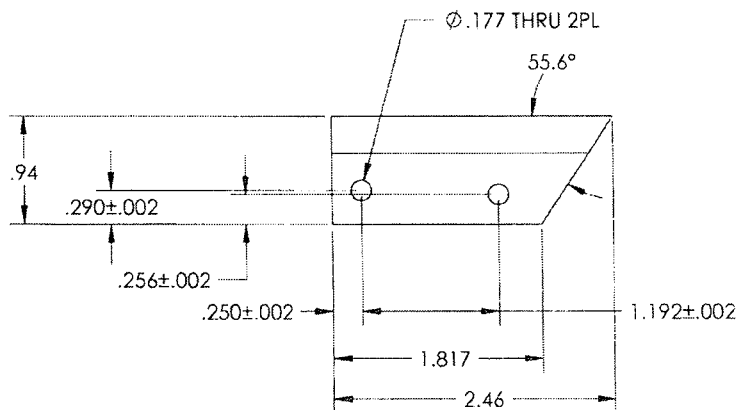
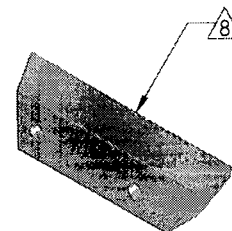
646.3314

QUANTITY: 1 PART NO: 071426 DRAWN BY: J. HUNT CHECKED BY: J. HUNT DESIGNED BY: J. HUNT DATE: 10/18/99 COMMENTS:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE TO 3 PLACES FRACTIONS ARE TO 16 PLACES UNLESS OTHERWISE SPECIFIED		SHEET 6 OF 6 SCALE: NONE Dwg No: 646.3300 Rev: 071426	Part No: 646.3314 Rev: NUC

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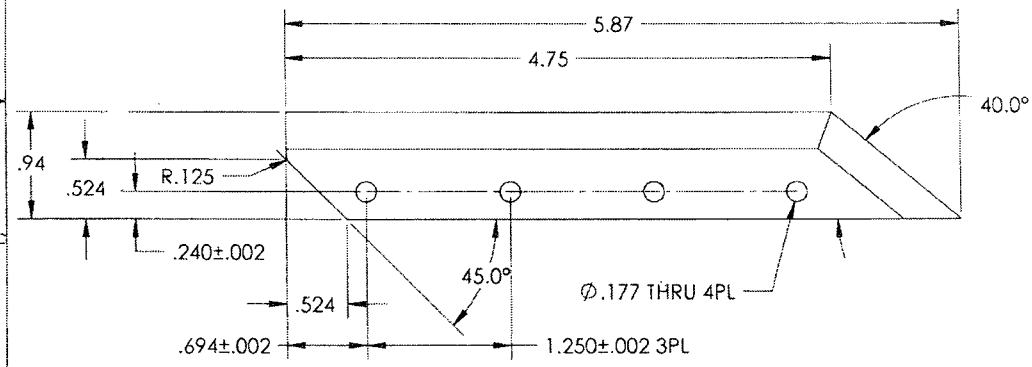
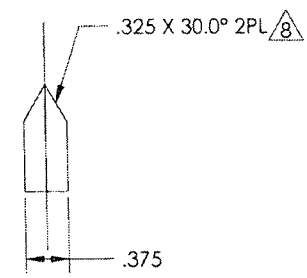
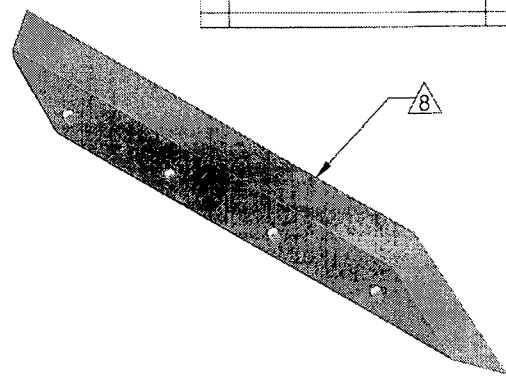
646.3315

ORIGINAL DATE JUN 04 1998	DESIGNER J. BRAY	APICAL INDUSTRIES	
DRAWN BY J. BRAY	CHECKER J. BRAY	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL J. BRAY		UPPER CUTTER ASSY	
CONTRACT NO.		SIZE B	REV N/C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SCALE NONE	SHEET 7 OF 8

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REV	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE: 08-20-00		APICAL INDUSTRIES	
DRAWN BY: J. HAYES		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. HAYES		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL:		UPPER CUTTER ASSY	
BY: J. HAYES		UNIT: UNLESS OTHERWISE SPECIFIED	
CONTRACT NO:		DIMENSIONS ARE IN INCHES	
		TOLERANCES ARE:	
		2 PLACE DECIMALS ± .01	
		3 PLACE DECIMALS ± .001	
		ANGLES ± .5°	
SIZE: 8	CAGE CODE: 07M20	DWG. NO: 646.3300	REV: M/C
SCALE: NONE		SHEET: 5 OF 8	

